WHAT IS CLAIMED IS:

1. An imaging apparatus comprising:

an imaging device having a plurality of pixels arranged in a two-dimensional fashion;

dark output level detecting means for detecting a dark output level for each pixel superposed on an imaging signal which is an output signal of said imaging device; and

dark output correction means for correcting the imaging signal based on the dark output level detected by said dark output level detecting means and setting a clip level for a subject component of the imaging signal according to the dark output level detected by said dark output level detecting means.

2. The imaging apparatus according to claim 1, wherein said dark output correction means sets the clip level based on the maximum value of the dark output level detected by said dark output level detecting means.

3. The imaging apparatus according to claim 1, which further comprises test imaging means for performing a charge storage and readout operation of said imaging device in a state where exposure to said imaging device is shielded and in which detection of the dark output level in said dark output detecting means is effected by deriving a dark output level at the actual imaging time based on test imaging time of

said test imaging means, an imaging device output level obtained by said test imaging means and charge storage time for exposure control at the actual imaging time.

4. The imaging apparatus according to claim 3, wherein the test imaging time and the charge storage time at the actual imaging time are set equal to each other and the imaging device output level obtained by said test imaging means is derived as the dark output level at the actual imaging time.

5. The imaging apparatus according to claim 3, wherein the test imaging time and the charge storage time at the actual imaging time are different from each other and the dark output level at the actual imaging time is derived by multiplying the imaging device output level X obtained by said test imaging means by a ratio Y/Z of the test imaging time Y of said test imaging means to the charge storage time Z for exposure control at the actual imaging time.

6. The imaging apparatus according to claim 5, wherein the test imaging time is shorter than the charge storage time at the actual imaging time.

7. An imaging apparatus comprising:

an imaging device having a plurality of pixels arranged in a two-dimensional fashion;

dark output level detecting means for detecting a dark output level for each pixel superposed on an imaging signal which is an output signal of said

imaging device; and

dark output correction means for correcting the imaging signal based on the dark output level detected by said dark output level detecting means and setting an effective gain for a subject component of the imaging signal according to the dark output level detected by said dark output level detecting means.

8. The imaging apparatus according to claim 7, which further comprises test imaging means for performing a charge storage and readout operation of said imaging device in a state where exposure to said imaging device is shielded, and in which detection of the dark output level in said dark output detecting means is effected by deriving a dark output level at the actual imaging time based on test imaging time of said test imaging means, an imaging device output level obtained by said test imaging means and charge storage time for exposure control at the actual imaging time.

9. The imaging apparatus according to claim 8, wherein the test imaging time and the charge storage time at the actual imaging time are set equal to each other and the imaging device output level obtained by said test imaging means is derived as the dark output level at the actual imaging time.

10. The imaging apparatus according to claim 8, wherein the test imaging time and the charge storage time at the actual imaging time are different from each

other and the dark output level at the actual imaging time is derived by multiplying the imaging device output level X obtained by said test imaging means by a ratio Y/Z of the test imaging time Y of said test imaging means to the charge storage time Z for exposure control at the actual imaging time.

11. The imaging apparatus according to claim 10, wherein the test imaging time is shorter than the charge storage time at the actual imaging time.

12. The imaging apparatus according to claim 7, wherein a value of the effective gain set by said dark output correction means is determined based on a resultant value obtained by dividing "a value corresponding to the saturation level on the output side of said dark output correction means" by a difference between "a value corresponding to the saturation level on the input side of said dark output correction means" and "the maximum value of the dark output level detected by said dark output level detecting means".

13. The imaging apparatus according to claim 12, wherein the value of the effective gain set by said dark output correction means is not smaller than the resultant value of the above division.

14. The imaging apparatus according to claim 13, wherein the value of the effective gain set by said dark output correction means is controlled in

a stepwise fashion.

15. The imaging apparatus according to claim 12, wherein the value of the effective gain set by said dark output correction means is equal to the resultant value of the above division.

16. The imaging apparatus according to claim 7, further comprising exposure correction means for correcting exposure of said imaging deice according to the gain setting in said dark output correction means.

17. An imaging apparatus comprising:

an imaging device having a plurality of pixels arranged in a two-dimensional fashion;

dark output level detecting means for detecting a dark output level for each pixel superposed on an imaging signal which is an output signal of said imaging device; and

dark output correction means for correcting the imaging signal based on the dark output level detected by said dark output level detecting means, setting a clip level for the corrected imaging signal according to the dark output level detected by said dark output level detecting means and setting an effective gain for the corrected imaging signal according to the dark output level detected by said dark output level detecting means.

18. The imaging apparatus according to claim 17, wherein said dark output correction means sets the clip

level based on the maximum value of the dark output level detected by said dark output level detecting means.

19. The imaging apparatus according to claim 17, which further comprises test imaging means for performing a charge storage and readout operation of said imaging device in a state where exposure to said imaging device is shielded, and in which detection of the dark output level in said dark output detecting means is effected by deriving a dark output level at the actual imaging time based on test imaging time of said test imaging means, an imaging device output level obtained by said test imaging means and charge storage time for exposure control at the actual imaging time.

20. The imaging apparatus according to claim 19, wherein the test imaging time and the charge storage time at the actual imaging time are set equal to each other and the imaging device output level obtained by said test imaging means is derived as the dark output level at the actual imaging time.

21. The imaging apparatus according to claim 19, wherein the test imaging time and the charge storage time at the actual imaging time are different from each other and the dark output level at the actual imaging time is derived by multiplying the imaging device output level X obtained by said test imaging means by a ratio Y/Z of the test imaging time Y by said test

imaging means to the charge storage time Z for exposure control at the actual imaging time.

22. The imaging apparatus according to claim 21, wherein the test imaging time is shorter than the charge storage time at the actual imaging time.

23. The imaging apparatus according to claim 17, wherein a value of the effective gain set by said dark output correction means is determined based on a resultant value obtained by dividing "a value corresponding to the saturation level on the output side of said dark output correction means" by a difference between "a value corresponding to the saturation level on the input side of said dark output correction means" and "the maximum value of the dark output level detected by said dark output level detecting means".

24. The imaging apparatus according to claim 23, wherein the value of the effective gain set by said dark output correction means is not smaller than the resultant value of the above division.

25. The imaging apparatus according to claim 24, wherein the value of the effective gain set by said dark output correction means is controlled in a stepwise fashion.

26. The imaging apparatus according to claim 23, wherein the value of the effective gain set by said dark output correction means is equal to the resultant

value of the above division.

27. The imaging apparatus according to claim 17, further comprising exposure correction means for correcting exposure of said imaging deice according to the gain setting in said dark output correction means.

28. An imaging apparatus comprising:

an imaging device having a plurality of pixels arranged in a two-dimensional fashion;

dark output level detecting means for detecting a dark output level for each pixel superposed on an imaging signal which is an output signal of the imaging device;

dark output correction means for correcting the imaging signal by eliminating a dark output component from the imaging signal for each pixel based on the dark output level detected by said dark output level detecting means, setting a clip level for the corrected imaging signal according to the maximum value of the dark output level detected by said dark output level detecting means and setting an effective gain for the corrected imaging signal according to the set clip level; and

exposure correction means for correcting exposure of said imaging device according to the gain setting in said dark output correction means.

29. An imaging method comprising the steps of:

imaging a subject by use of an imaging device

which has a plurality of pixels arranged in a two-dimensional fashion;

detecting a dark output level for each pixel superposed on an imaging signal obtained by imaging the subject;

correcting the imaging signal based on the detected dark output level;

setting a clip level for the corrected imaging signal according to the detected dark output level; and

setting an effective gain for the corrected imaging signal according to the set clip level.

30. An imaging method comprising the steps of:

imaging a subject by use of an imaging device which has a plurality of pixels arranged in a two-dimensional fashion;

detecting a dark output level for each pixel superposed on an imaging signal obtained by imaging the subject;

correcting the imaging signal based on the detected dark output level;

setting a clip level for the corrected imaging signal according to the detected dark output level;

setting an effective gain for the corrected imaging signal according to the set clip level; and

controlling exposure of the imaging device according to the set gain.